Washington State Department of Health

ELABORATIONS

News and Issues for Washington's Clinical Laboratories

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Chemical Terrorism – More Likely Than You Might Expect

by Catherine Franklin, PhD, DOH/PHL

A terrorism incident involving a hazardous chemical is more easily engineered than one involving a biologic agent. Hazardous chemicals, whether toxic industrial (or agricultural) chemicals (TICs) or chemical warfare agents (CWA) are more readily available, less costly, and require less technology to produce and deliver than biologic agents. Consider, for example, the news vignettes below.

> *The Jackson Sun News* (TN), October 26, 2004: "Federal authorities have charged a McKenzie man with attempting to acquire chemical weapons, explosives and weapons of mass destruction to "blow up" government buildings… told the agent he had made a chemical weapon, specifically mustard gas, in the past. He said he had once worked at an electroplating factory and had access to various chemicals from the factory."

> *The Grand Forks Herald* (ND), October 7, 2004: "An incident involving three barrels of the sodium cyanide that fell off the back of a truck somewhere between Devils Lake and Cavalier, N.D., has attracted the attention of the FBI, and the U.S. Department of Homeland Security."

> *The Journal Times & Gazette Courier* (IL), October 8, 2004: "All lanes of Interstate 70 near Greenup were closed for about 10 hours Thursday following a hazardous chemical spill. The Illinois State Police in Effingham reported that a tanker truck in the eastbound lane of I-70 was leaking hydrofluoric acid."

Sulfur mustard (commonly called mustard gas or mustard) and cyanide are both classified as chemical warfare agents (CWA). Hydrofluoric acid and cyanide are highly toxic, but are common legitimate-use industrial chemicals that are produced in great quantities. While the incidents described in the press were accidental, it is advisable to anticipate and plan for the possibility of a deliberate chemical release event.

continued on page 3

Inside This Issue

Practice Guidelines

The following practice guidelines have been developed by the Clinical Laboratory Advisory Council. They can be accessed at the following website:
www.doh.wa.gov/lqa.htm

Anemia	Lipid Screening
ANA	Point-of-Care Testing
Bioterrorism Event Mgmt	PSA
Bleeding Disorders	Rash Illness
Chlamydia	Red Cell Transfusion
Diabetes	Renal Disease
Group A Strep Pharyngitis	STD
Hepatitis	Thyroid
HIV	Tuberculosis
Infectious Diarrhea	Urinalysis
Intestinal Parasites	Wellness

New Phone Numbers at PHL/LQA

In the words of the poet, "The times they are a-changin'" (Bob Dylan). Here at the PHL, that is better said as "*the phones they are a-changin'"* and new telephone numbers abound.

As a consequence of the upgrading of the Tumwater and Seattle Department of Health telephone systems, telephone numbers at the PHL are changing effective December 6, 2004. Both new and old phone numbers will work for a few weeks thereafter as we transition completely to the new systems. The box on page 4 of this issue of Elaborations lists some of the more frequently called new telephone numbers. The main PHL workday access number is 206-418-5400. All PHL numbers will have the same format of 206-418-xxxx.

Our old PBX system has hit its end of life span and there is no longer any technical support for that system. The new system allows Tumwater and Seattle to have an integrated telephone system. There are multiple advantages to the integrated system: customers calling in can be transferred between Tumwater and Seattle, if necessary, without their having to redial. Tumwater and Seattle offices will have 4-digit dialing between them and no longer have to incur long distance charges when communicating between sites. Finally, the new telephones are clearer-sounding instruments, which should help reduce miscommunications due to poor voice transfer.

PHL Environmental Lab Has New Office Director

by Catherine Franklin, PhD, DOH/PHL

The Washington Public Health Laboratories is pleased to announce the appointment of Dr. Nathan Lacy as the Environmental Laboratory Sciences Office Director. He succeeds Ms. Marina Silverstone who held the position as Acting Office Director for the past 3 years. Dr. Lacy received his BS and MS degrees in Chemistry from Eastern Washington University, his Ph.D. in Analytical Chemistry from the University of Washington, and he also holds an MS degree in Technical Management from The Johns Hopkins University. Dr. Lacy retired as a Commander, Medical Service Corps, United States Navy, after serving approximately 21.5 years in positions ranging from drug screening to teaching at the United States Naval Academy.

The Office of Environmental Laboratory Sciences (ELS) has approximately twenty-five technical staff members, and is divided into two main sections: Environmental Microbiology and Environmental Chemistry and Radiation. This office is comprised of seven units that include the Radiation Laboratory, Chemistry Laboratory, Water Microbiology Laboratory, Food Laboratory, Biotoxins Laboratory, Chemical Terrorism Response and Parasitology Laboratory. These laboratory units provide a wide variety of testing of environmental samples and human specimens, and are certified by several federal programs that include the EPA, FDA, College of American Pathologists and the Nuclear Regulatory Commission. This unit, in support of the Department of Health programs, performs the majority of the chemical analyses. The Department of Ecology, the Department of Agriculture, local health jurisdictions and private citizens utilize these laboratory services as well. Through the activities of testing samples and specimens, the ELS laboratories serve as the reference laboratories for drinking water bacteriological and radiological tests, for food pathogen tests and for parasitology tests in support of State Environmental Health Programs.

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NOTE: Letters to the editor may be published unless specified otherwise by the author.

Website addresses:
DOH home page: http://www.doh.wa.gov
LQA home page: http://www.doh.wa.gov/lqa.htm
PHL home page:
http://www.doh.wa.gov/EHSPHL/PHL/default.htm

Chemical Terrorism, continued from page 1

Fortunately, most chemical spills and even deliberate acts of terrorism do not result in high mortality rates. A chemical attack, however, can cause extensive incapacitation and overload response agencies and systems, as much by the threat of such an attack as by the act itself. Significant or problematic exposure to chemical agents usually results in a rapid observable "signature" (i.e. symptoms) indicating exposure to a particular type of chemical.

A common way of classifying chemical warfare agents (CWA) is by the biochemical/biological signature effect of the chemical. The broad categories of CWAs include: Blister Agents, such as sulfur mustard; Blood Agents, such as cyanide; Lung-damaging Agents, such as chlorine gas; and Nerve Agents, such as Sarin. The classification scheme used for Toxic Industrial Chemicals is based on the physical and chemical properties of the material. These include, but are not limited to, corrosives such as hydrofluoric acid, explosives such as ammonium nitrate, flammables such as gasoline, metabolics such as cyanide, pesticides such as chlorpyrifos (i.e. Dursban) and pressurized gases such as chlorine.

For more information about the Washington State Public Health Laboratories role in chemical terrorism preparedness, contact Cate Franklin at (206) 418-5403, or send an email to Catherine.Franklin@doh.wa.gov.

LQA Staffing Update

by Gail Neuenschwander

The time has come for some changes at the Office of Laboratory Quality Assurance. After thirty years working for the Department of Health, I am retiring from state service. My career with DOH has been a very interesting and rewarding experience, starting out in the Public Health Laboratory and then moving on to LQA. I will miss all of the people I have worked with and met throughout the years. Thanks to all of you who have made my job enjoyable because of your dedication to the laboratory profession and the quality laboratory testing that you do.

Susan Walker has been appointed as the new manager for the Office of Laboratory Quality Assurance. Susan has been a part of LQA since we implemented the Medical Test Site Law in 1990, so the transition to her new position should be a smooth one. Susan can be reached at the LQA Seattle Office by phone at (206) 418-5418, by fax at (206) 418-5505, and by e-mail at susan.walker@doh.wa.gov. Susan's mailing address is:

Susan Walker
LQA
1610 NE 150th Street
Shoreline, WA 98155

Linda Parisi has joined LQA as the new surveyor for the Pierce/Kitsap/SW Washington area, and will be based in our Olympia office. Linda has many years of experience working in, and managing clinical laboratories. We are excited to have her join our team. Linda can be reached at the LQA Olympia Office by phone at (360) 236-2966, by fax at (360) 236-2901, and by e-mail at linda.parisi@doh.wa.gov. Linda's mailing address is:

Linda Parisi
LQA
PO Box 47852
Olympia, WA 98504-7852

A new phone system is being installed in the Department of Health Seattle offices. The LQA and Public Health Laboratories personnel located there will have new phone numbers effective December 6, 2004. See pages 2 and 4 for information on the updated numbers for the LQA and PHL staff.

LQA/PHL New Phone Numbers As of 12-6-04

Laboratory Quality Assurance
Main Number (206) 418-5600
Fax (206) 418-5505
Leonard Kargacin (206) 418-5416
Kathy LaBeau (206) 418-5417
Vicky Terry (206) 418-5600
Susan Walker (206) 418-5418

Public Health Laboratories
Receptionist (206) 418-5400
Fax (206) 418-5445
Training Program (206) 418-5402
Supply Ordering (206) 418-5579
Fax (206) 418-5405

Communicable Disease/Epidemiology
Main Number (206) 418-5500 (24-hour #)
Fax (206) 418-5515

Calendar of Events

PHL Training Classes:
(http://www.doh.wa.gov/EHSPHL/PHL/train.htm)

Parasitology Part II: Protozoans
January 12 & 13 Shoreline

Handling & Shipping of Biohazardous Materials
January 20 Shoreline

WSSCLS/NWSSAMT Spring Meeting
April 28-30, 2005 Spokane

Northwest Medical Laboratory Symposium
October 26-29, 2005 Seattle

12th Annual Clinical Laboratory Conference
November 2005 Seattle

Contact information for the events listed above can be found on page 2. The Calendar of Events is a list of upcoming conferences, deadlines, and other dates of interest to the clinical laboratory community. If you have events that you would like to have included, please mail them to ELABORATIONS at the address on page 2. Information must be received at least one month before the scheduled event. The editor reserves the right to make final decisions on inclusion.

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